

Serial No.: 09/819,464
Group Art Unit No.: 1648

Amendments to the Claims

The following listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

- 47,48, 50-73. (cancelled)
74. (new) A composition comprising: 1) an antigen; 2) a saponin which is substantially pure QS21; 3) a sterol that is present in excess by weight with respect to the saponin.
75. (new) The composition of Claim 74 wherein the weight:weight ratio of QS21 to sterol is 1:2 to 1:100, which composition is formulated in an aqueous buffered medium.
76. (new) The composition of Claim 75 wherein the sterol is cholesterol.
77. (new) The composition of Claim 74 which further comprises a derivative of an enterobacterial lipopolysaccharide.
78. (new) The composition of Claim 74 which further comprises a metal particle salt carrier selected from the group consisting of phosphate and hydroxide salts of aluminum, zinc, calcium, cerium, chromium, iron, and beryllium.
79. (new) The composition of Claim 76 which further comprises a 3-O-deacylated monophosphoryl lipid A.
80. (new) The composition of Claim 76 which further comprises aluminum hydroxide or aluminum phosphate.
81. (new) The composition of Claim 76 which further comprises a 3-O-deacylated monophosphoryl lipid A and aluminum hydroxide or aluminum phosphate.
82. (new) The composition of Claim 79 wherein the saponin is at least 98% pure QS21.

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83. (new) The composition of Claim 74 wherein the sterol and the QS21 are in a vesicle-like structure.
84. (new) The composition of Claim 74 wherein the antigen is derived from Human Immunodeficiency virus, Feline Immunodeficiency virus, Varicella Zoster virus, Herpes Simplex virus type 1, Herpes Simplex virus type 2, Human cytomegalovirus, Hepatitis A, Hepatitis B, Hepatitis C, Hepatitis E, Respiratory Syncytial virus, Human Papilloma virus, Influenza virus, Haemophilus Influenza B, Meningitis virus, Salmonella, Neisseria, Borrelia, Chlamydia, Bordetella, Plasmodium, or Toxoplasma.
85. (new) A method comprising administering to a patient an effective amount of the composition of claim 74 to achieve an immunogenic response.
86. (new) The method of Claim 85 wherein the sterol is cholesterol.
87. (new) The method of Claim 85 wherein the composition further comprises a derivative of an enterobacterial lipopolysaccharide.
88. (new) The method of Claim 85 wherein the composition further comprises a metal particle salt carrier selected from the group consisting of phosphate and hydroxide salts of aluminum, zinc, calcium, cerium, chromium, iron, and beryllium.
89. (new) The method of Claim 86 wherein the composition further comprises a 3-O-deacylated monophosphoryl lipid A.
90. (new) The method of Claim 86 wherein the composition further comprises aluminum hydroxide or aluminum phosphate.
91. (new) The method of Claim 86 wherein the composition further comprises 3-O-deacylated monophosphoryl lipid A and aluminum hydroxide or aluminum phosphate.
92. (new) The method of Claim 85 wherein the saponin is at least 98% pure QS21 and wherein the sterol and the QS21 are in a vesicle-like structure.

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93. (new) The method of Claim 85 wherein the antigen is derived from Human Immunodeficiency virus, Feline Immunodeficiency virus, Varicella Zoster virus, Herpes Simplex virus type 1, Herpes Simplex virus type 2, Human cytomegalovirus, Hepatitis A, Hepatitis B, Hepatitis C, Hepatitis E, Respiratory Syncytial virus, Human Papilloma virus, Influenza virus, Haemophilus Influenza B, Meningitis virus, Salmonella, Neisseria, Borrelia, Chlamydia, Bordetella, Plasmodium, or Toxoplasma.